

Amendments to the Claims

The following listing of the claims will replace all prior versions and listings of claims in the application:

Listing of Claims:

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Claims 1- 61 (canceled)

Claim 62 (new): An isolated expression vector comprising (a) a silencer-inducible region comprising at least one hypoxia response enhancer element and at least one neuron restrictive silencer element that binds neuron restrictive silencer factor and (b) a promoter upstream of at least one nucleotide sequence and in operable linkage with and regulated by the silencer-inducible region, the at least one neuron restrictive silencer element and at least one hypoxia response enhancer element being arranged within 500 nucleotides of each other,

wherein expression of the at least one nucleotide sequence is silenced when the vector is incorporated in a non-hypoxic cell and the silenced expression is reversed when the cell is made hypoxic.

Claim 63 (new): An isolated expression vector comprising (a) a silencer-inducible region comprising at least one hypoxia response enhancer element and at least one neuron restrictive silencer element from the human synapsin gene and (b) a promoter upstream of at least one nucleotide sequence and in operable linkage with and regulated by the silencer-inducible region, the at least one neuron restrictive silencer element and at least one hypoxia response enhancer element being arranged within 500 nucleotides of each other,

wherein expression of the at least one nucleotide sequence is silenced when the vector is incorporated in a non-hypoxic cell and the silenced expression is reversed when the cell is made hypoxic.

Claim 64 (new): An isolated expression vector comprising (a) a silencer-inducible region comprising at least one hypoxia response enhancer element and at least one neuron restrictive silencer element that comprises the sequence of SEQ ID NO:2 and (b) a promoter upstream of at least one nucleotide sequence and in operable linkage with and regulated by the silencer-inducible region, the at least one neuron restrictive silencer element and at least one hypoxia response enhancer element being arranged within 500 nucleotides of each other,

wherein expression of the at least one nucleotide sequence is silenced when the vector is incorporated in a non-hypoxic cell and the silenced expression is reversed when the cell is made hypoxic.

Claim 65 (new): An isolated expression vector comprising (a) a silencer-inducible region comprising at least one hypoxia response enhancer element from the human phosphoglycerate kinase gene and at least one neuron restrictive silencer element that binds neuron restrictive silencer factor and (b) a promoter upstream of at least one nucleotide sequence and in operable linkage with and regulated by the silencer-inducible region, the at least one neuron restrictive silencer element and at least one hypoxia response enhancer element being arranged within 500 nucleotides of each other,

wherein expression of the at least one nucleotide sequence is silenced when the vector is incorporated in a non-hypoxic cell and the silenced expression is reversed when the cell is made hypoxic.

Claim 66 (new): An isolated expression vector comprising (a) a silencer-inducible region comprising at least one hypoxia response enhancer element that comprises the sequence of SEQ ID NO:1, and at least one neuron restrictive silencer element that binds neuron restrictive silencer factor and (b) a promoter upstream of at least one nucleotide sequence and in operable linkage with and regulated by the silencer-inducible region, the at least one neuron restrictive silencer element and at least one hypoxia response enhancer element being arranged within 500 nucleotides of each other,

wherein expression of the at least one nucleotide sequence is silenced when the vector is incorporated in a non-hypoxic cell and the silenced expression is reversed when the cell is made hypoxic.

Claim 67 (new): An isolated expression vector comprising (a) a silencer-inducible region comprising at least one hypoxia response enhancer element that binds hypoxia inducible factor-1, and at least one neuron restrictive silencer element that binds neuron restrictive silencer factor and (b) a promoter upstream of at least one nucleotide sequence and in operable linkage with and regulated by the silencer-inducible region, the at least one neuron restrictive silencer element and at least one hypoxia response enhancer element being arranged within 500 nucleotides of each other, wherein expression of the at least one nucleotide sequence is silenced

when the vector is incorporated in a non-hypoxic cell and the silenced expression is reversed when the cell is made hypoxic.

Claim 68 (new): An isolated expression vector comprising (a) a silencer-inducible region comprising at least one hypoxia response enhancer element and at least one neuron restrictive silencer element that binds neuron restrictive silencer factor and (b) a viral promoter upstream of at least one nucleotide sequence and in operable linkage with and regulated by the silencer-inducible region, the at least one neuron restrictive silencer element and at least one hypoxia response enhancer element being arranged within 500 nucleotides of each other,

wherein expression of the at least one nucleotide sequence is silenced when the vector is incorporated in a non-hypoxic cell and the silenced expression is reversed when the cell is made hypoxic.

Claim 69 (new): An isolated expression vector comprising (a) a silencer-inducible region comprising at least one hypoxia response enhancer element and at least one neuron restrictive silencer element that binds neuron restrictive silencer factor and (b) a mammalian promoter upstream of at least one nucleotide sequence and in operable linkage with and regulated by the silencer-inducible region, the at least one neuron restrictive silencer element and at least one hypoxia response enhancer element being arranged within 500 nucleotides of each other,

wherein expression of the at least one nucleotide sequence is silenced when the vector is incorporated in a non-hypoxic cell and the silenced expression is reversed when the cell is made hypoxic.

Claim 70 (new): An isolated expression vector comprising (a) a silencer-inducible region comprising at least one hypoxia response enhancer element and at least one neuron restrictive silencer element that binds neuron restrictive silencer factor and (b) a cell-type specific promoter upstream of at least one nucleotide sequence and in operable linkage with and regulated by the silencer-inducible region, the at least one neuron restrictive silencer element and at least one hypoxia response enhancer element being arranged within 500 nucleotides of each other,

wherein expression of the at least one nucleotide sequence is silenced when the vector is incorporated in a non-hypoxic cell and the silenced expression is reversed when the cell is made hypoxic.

Claim 71 (new): An isolated expression vector comprising (a) a silencer-inducible region comprising at least one hypoxia response enhancer element and at least one neuron restrictive silencer element that binds neuron restrictive silencer factor and (b) a promoter upstream of at least one nucleotide sequence and in operable linkage with and regulated by the silencer-inducible region, the at least one neuron restrictive silencer element and at least one hypoxia response enhancer element being arranged within 500 nucleotides of each other,

wherein expression of the at least one nucleotide sequence is silenced when the vector is incorporated in a non-hypoxic cell and the silenced expression is reversed when the cell is made hypoxic, and

wherein the nucleotide sequence is a functional coding region of a gene selected from the group consisting of adenosine deaminase, angiopoietin, apoptosis inhibitor protein, angiostatin, B-cell CLL/lymphoma, catalase, deoxyribonuclease, DT-diaphorase, endostatin, erythropoietin, fibroblast growth factor, fumagillin, β -globin, glutathione peroxidase, granulocyte-colony stimulating factor, granulocyte macrophage-colony stimulating factor, heat shock transcription factor, hepatocyte growth factor, interferon, tissue metalloproteinase inhibitor, nitric oxide synthase, platelet derived growth factor, proliferin, somatomedin C, superoxide dismutase, survivin, thymidine kinase, tissue plasminogen activator, tumor protein p53, urokinase, and vascular endothelial growth factor.

Claim 72 (new): An isolated expression vector comprising (a) a silencer-inducible region comprising at least one hypoxia response enhancer element and at least one neuron restrictive silencer element that binds neuron restrictive silencer factor and (b) a promoter upstream of at least one nucleotide sequence and in operable linkage with and regulated by the silencer-inducible region, the at least one neuron restrictive silencer element and at least one hypoxia response enhancer element being arranged within 500 nucleotides of each other,

wherein expression of the at least one nucleotide sequence is silenced when the vector is incorporated in a non-hypoxic cell and the silenced expression is reversed when the cell is made hypoxic, and

wherein the expression vector further comprises one or more sequences selected from the group consisting of a Kozak sequence, a transcription termination sequence, a polyadenylation sequence and a mRNA degradation sequence.

Claim 73 (new): An isolated expression vector comprising (a) a silencer-inducible region comprising at least one hypoxia response enhancer element and at least one neuron restrictive silencer element that binds neuron restrictive silencer factor and (b) a promoter upstream of at least one nucleotide sequence and in operable linkage with and regulated by the silencer-inducible region, the at least one neuron restrictive silencer element and at least one hypoxia response enhancer element being arranged within 500 nucleotides of each other,

wherein expression of the at least one nucleotide sequence is silenced when the vector is incorporated in a non-hypoxic cell and the silenced expression is reversed when the cell is made hypoxic, and

wherein the expression vector is encapsulated within an Adeno-Associated Virus particle.

Claim 74 (new): An isolated expression vector comprising (a) a silencer-inducible region comprising at least one NF- κ B responsive element and at least one neuron restrictive silencer element that binds neuron restrictive silencer factor and (b) a promoter upstream of at least one nucleotide sequence and in operable linkage with and regulated by the silencer-inducible region, wherein the at least one neuron restrictive silencer element and at least one NF- κ B responsive element are arranged within 500 nucleotides of each other,

wherein expression of the at least one nucleotide sequence is silenced when the vector is incorporated in a cell subjected to a condition that results in NF- κ B binding to the NF- κ B responsive element, and the silenced expression is reversed when the condition is removed from the cell.